

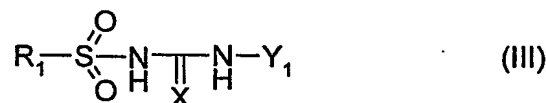
Claims

1. Composition comprising

- a) a colour former compound,
- b) a developer, which is different from the stabilizer used as component c),
- c) a stabilizer, selected from the group consisting of compounds having the formulae I, II and III,



and



wherein

R_1 stands for unsubstituted or substituted phenyl or naphthyl, C_1 - C_{20} alkyl, C_3 - C_{10} cycloalkyl, wherein the carbon chains of the alkyl (i.e. at least two carbon atoms) and cycloalkyl groups may be interrupted by -O-, -S-, -NH-radicals, or unsubstituted or substituted aralkyl having from seven to twelve carbon atoms,

R_2 stands for hydrogen, unsubstituted or substituted phenyl, naphthyl, C_1 - C_{20} alkyl, unsubstituted or substituted aralkyl having from seven to twelve carbon atoms, or R_2 stands for $-\text{R}_3\text{-B-R}_4$, in which R_3 stands for phenylene or naphthylene, in particular for o-, m- or p-phenylene, preferably p-phenylene, or 1,2; 2,3; 1,4 or 1,5-naphthylene, preferably 1,5-naphthylene, and wherein B stands for -O-SO₂-, -SO₂-O-, -NH-SO₂-, -SO₂-NH-, -S-SO₂-, -O-CO-, -O-CO-NH-, -NH-CO-, -NH-CO-O-, -S-CO-NH-, -S-CS-NH-, -CO-NH-SO₂-, -O-CO-, -NH-SO₂-, -NH=CH-, -CO-NH-CO-, -S-, -CO-, -O-, -SO₂-NH-CO-, -O-CO-O-, -CH₂-, -CH₂CH₂-, -SO₂-, -O-PO-(OR₄)₂-, -CONH- and -COO-, preferably -O-SO₂-, -SO₂-O-, -SO₂-NH-, -S-SO₂-, -O-CO-, -SO₂-, -CH₂-, -O-CO-NH-, -CONH-, -O- and -COO-, more preferably -O-SO₂-, -SO₂-O-, -O-CO-, SO₂-, -O- and -SO₂-NH-, and most preferred -O-SO₂-, -O- and -COO-, and R_4 stands for hydrogen, C_6 - C_{10} aryl, preferably phenyl or naphthyl which can be unsubstituted or substituted one to three times by, for example, C_1 - C_8 alkyl, halogen-substituted C_1 - C_8 alkyl, C_1 - C_8 alkoxy-substituted C_1 - C_8 alkyl, C_1 - C_8 alkoxy, halogen-substituted C_1 - C_8 alkoxy or halogen, preferred C_1 - C_4 alkyl and C_1 - C_4 alkoxy, preferred substituents are C_1 -

C₄ alkyl and halogen, in particular preferred are phenyl which is unsubstituted or substituted by C₁-C₈ alkyl, halogen-substituted C₁-C₈ alkyl, C₁-C₈ alkoxy-substituted C₁-C₈ alkyl, C₁-C₈ alkoxy, halogen-substituted C₁-C₈ alkoxy or halogen, and unsubstituted naphthyl, more preferred are phenyl which is unsubstituted or substituted by C₁-C₄ alkyl or halogen, and naphthyl, especially phenyl which is unsubstituted or substituted by C₁-C₄ alkyl, benzyl, unsubstituted, preferred, or substituted one to three times by C₁-C₈ alkyl, halogen-substituted C₁-C₈ alkyl, C₁-C₈ alkoxy-substituted C₁-C₈ alkyl, C₁-C₈ alkoxy, halogen-substituted C₁-C₈ alkoxy or halogen, preferred is unsubstituted benzyl, or C₁-C₂₀ alkyl, preferably C₁-C₈ alkyl, more preferably C₁-C₆ alkyl, most preferred C₁-C₄ alkyl, which can be unsubstituted, preferred, or substituted one to three times by, for example, C₁-C₈ alkoxy, halogen, preferred halogen-substituted C₁-C₆ alkyl, more preferred halogen-substituted C₁-C₄ alkyl, phenyl or naphthyl, preferred phenyl-substituted C₁-C₆ alkyl, or naphthyl-substituted C₁-C₆ alkyl,

A represents a multivalent group having a valency of 2, 3 or 4, n represents an integer of 2, 3 or 4, and X stands for oxygen or sulphur,

Y₁ stands for a heterocyclic ring having from two to seven carbon atoms and from 1 to three atoms selected from the group consisting of oxygen, nitrogen and sulphur, which can be substituted one to three times with unsubstituted or substituted phenyl, C₁-C₂₀ alkyl, C₁-C₈ alkoxy, halogen or -SO₂R₆, R₆ stands for phenyl, which may be substituted one to three times with C₁-C₄ alkyl, wherein the total number of carbon, oxygen, sulphur and nitrogen atoms of the heterocyclic ring is from 5 to 9,

and wherein the amount of the stabilizer is less than 5% by weight, based on the total weight of the composition.

2. Heat-sensitive recording material comprising:

a substrate sheet, and

a heat-sensitive coloured image-forming layer formed on the surface of the substrate sheet and comprising the composition of claim 1.

3. Use the composition of claim 1 as heat-sensitive coloured image-forming layer for the manufacture of a heat-sensitive recording material.